

# ECONOMICS

N. GREGORY MANKIW  
AND MARK P. TAYLOR

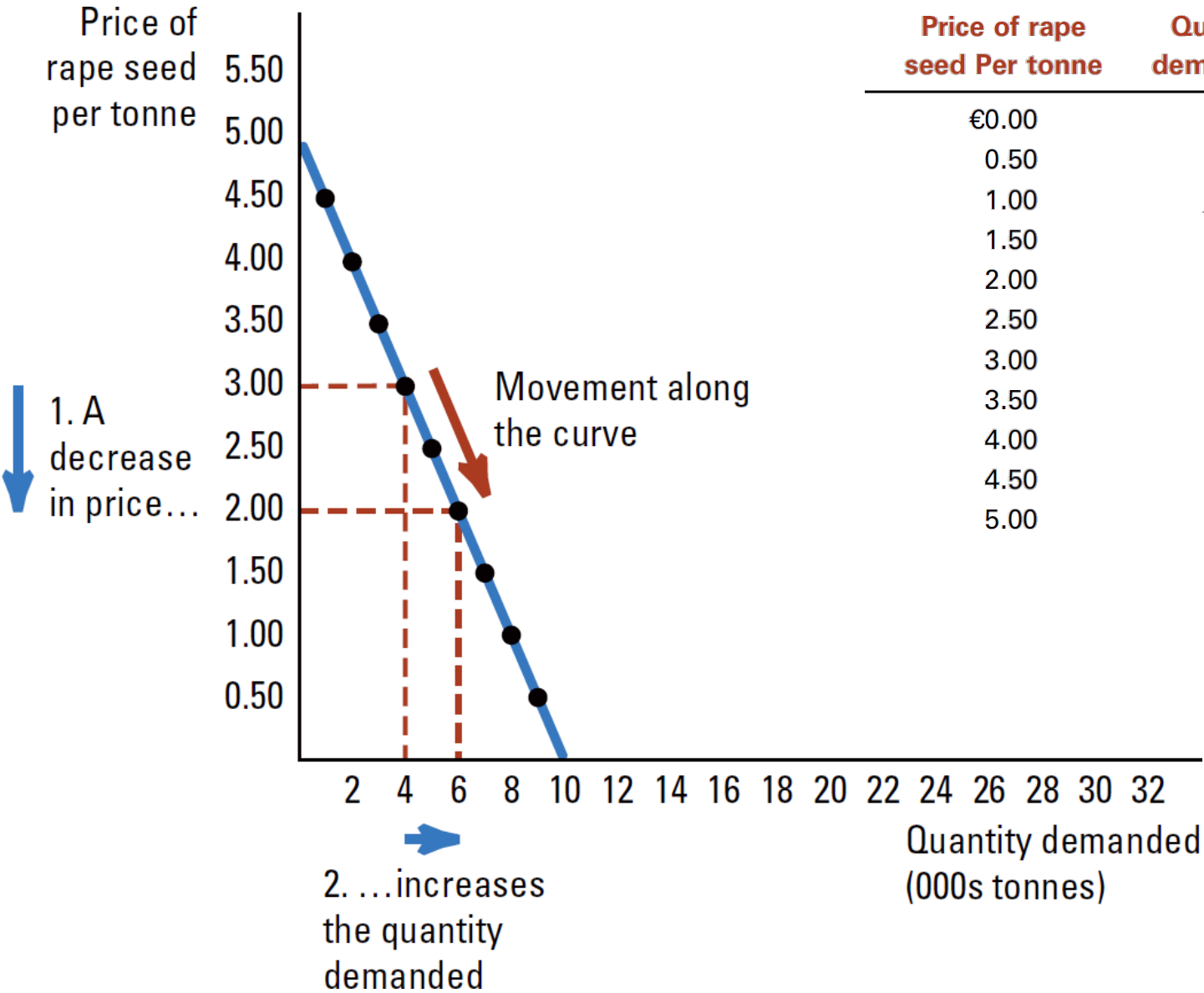
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## EXHIBITS

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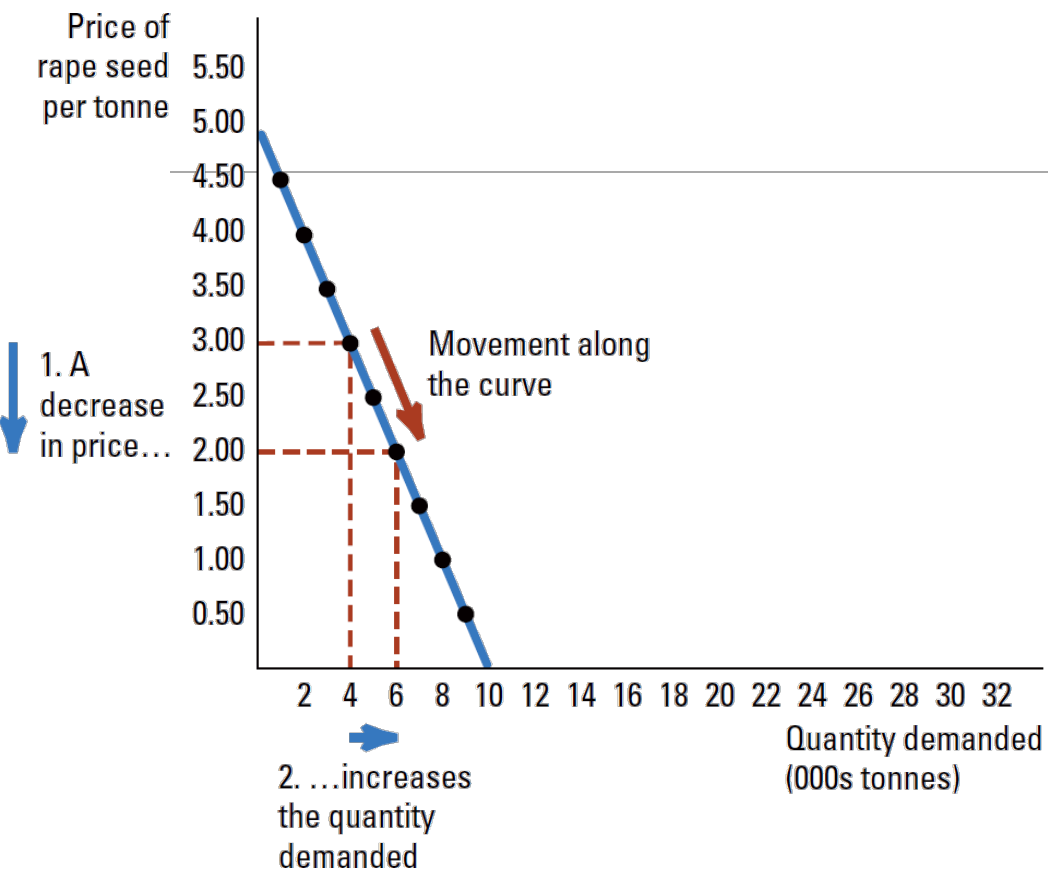
THE MARKET FORCES OF SUPPLY AND DEMAND

Tramontana's Demand Schedule & Demand Curve



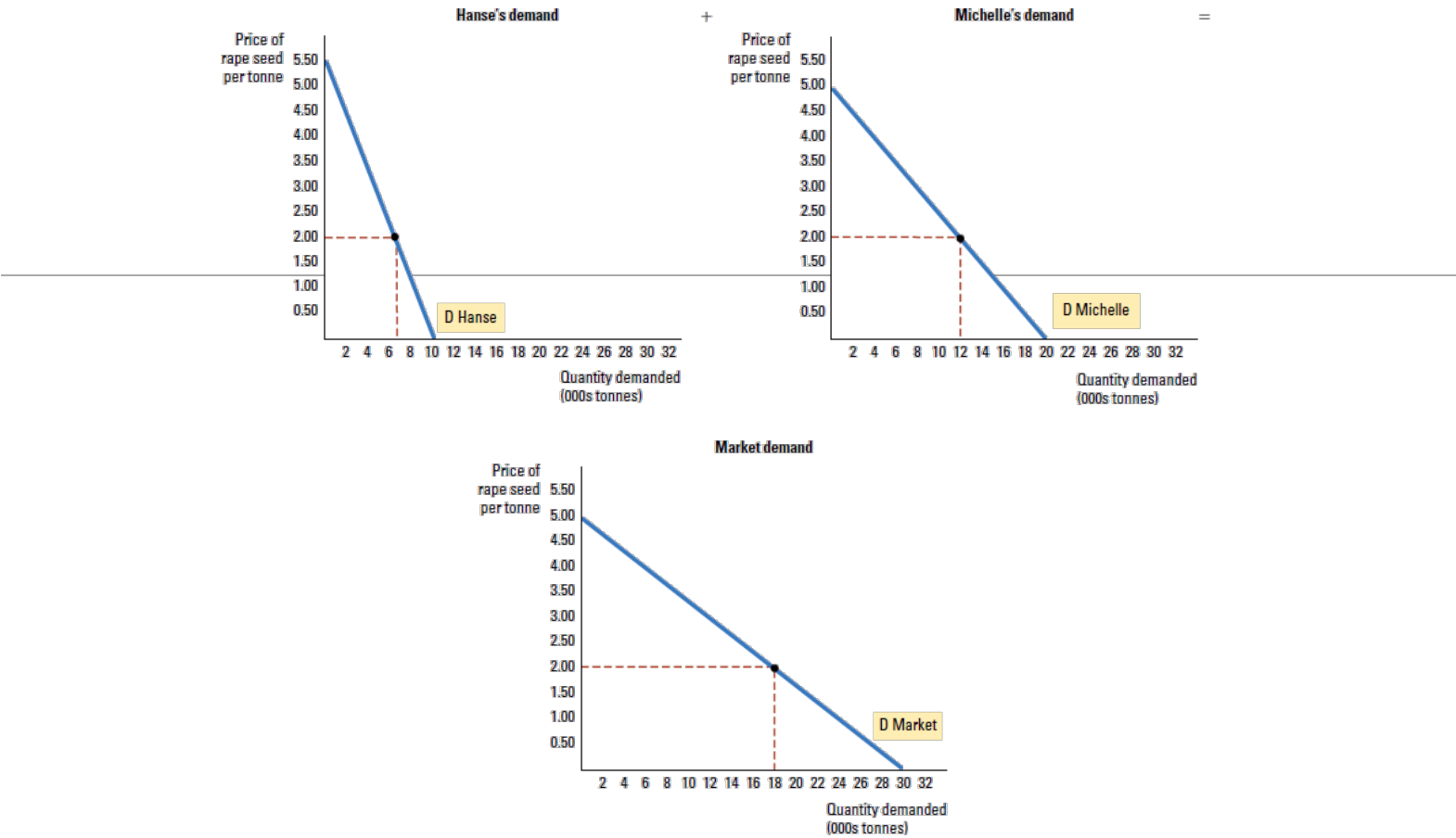
Price of rape seed Per tonne	Quantity of rape seed demanded (000s tonnes)
€0.00	10
0.50	9
1.00	8
1.50	7
2.00	6
2.50	5
3.00	4
3.50	3
4.00	2
4.50	1
5.00	0

Hanse's Demand Schedule & Demand Curve



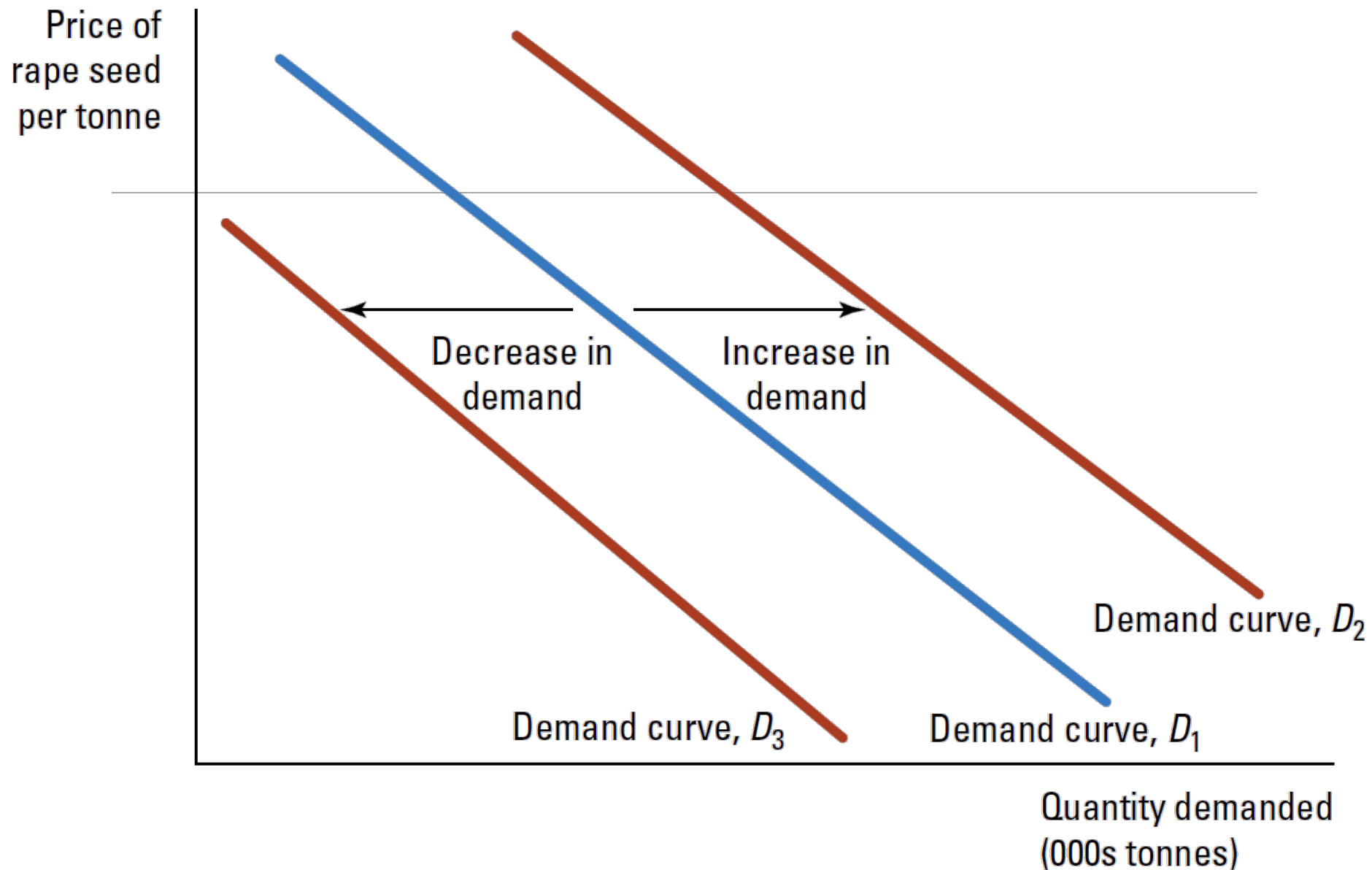
Price of rape seed Per tonne	Quantity of rape seed demanded (000s tonnes)
€0.00	10
0.50	9
1.00	8
1.50	7
2.00	6
2.50	5
3.00	4
3.50	3
4.00	2
4.50	1
5.00	0

# Market Demand Schedule & Demand Curve

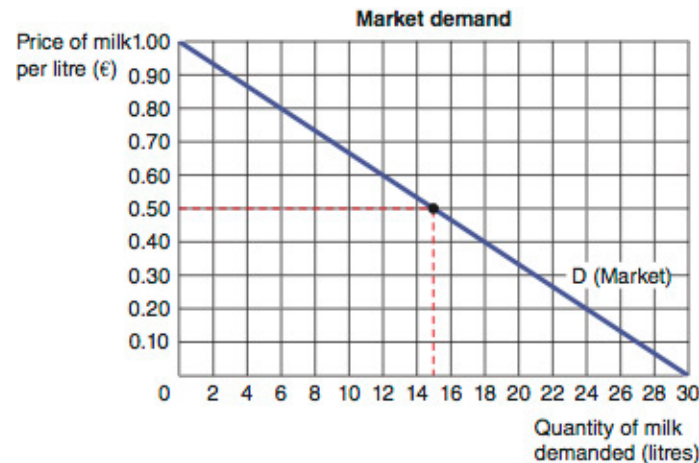
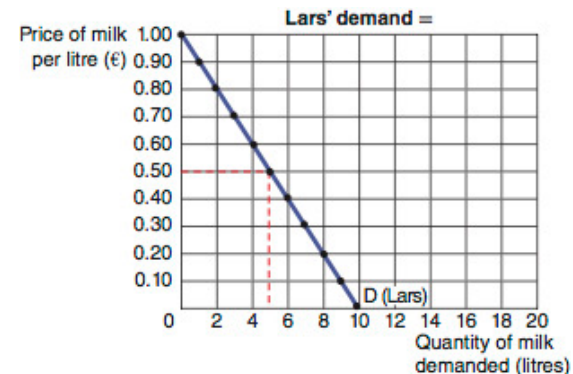
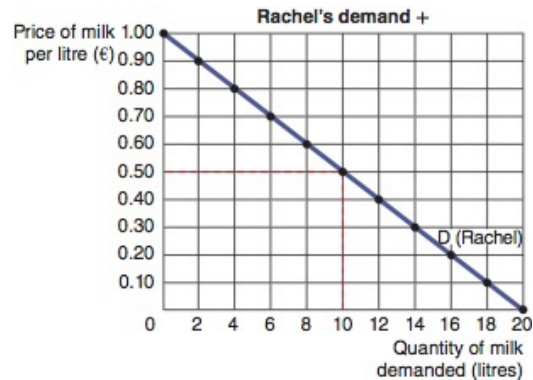


Price of rape seed per tonne	Hanse		Michelle		Market (000s tonnes)
€0.00	10	+	20	=	30
0.50	9		18		27
1.00	8		16		24
1.50	7		14		21
2.00	6		12		18
2.50	5		10		15
3.00	4		8		12
3.50	3		6		9
4.00	2		4		6
4.50	1		2		3
5.00	0		0		0

## Shifts in the Demand Curve



# Market demand as the sum of individual demand



*This table lists the variables that affect how much producers choose to sell of any good. Notice the special role that the price of the good plays: a change in the good's price represents a movement along the supply curve, whereas a change in one of the other variables shifts the supply curve.*

Variable	A change in this variable ...
Price	Is represented as a movement along the supply curve
Input prices	Shifts the supply curve
Technology	Shifts the supply curve
Expectations	Shifts the supply curve
Number of sellers	Shifts the supply curve

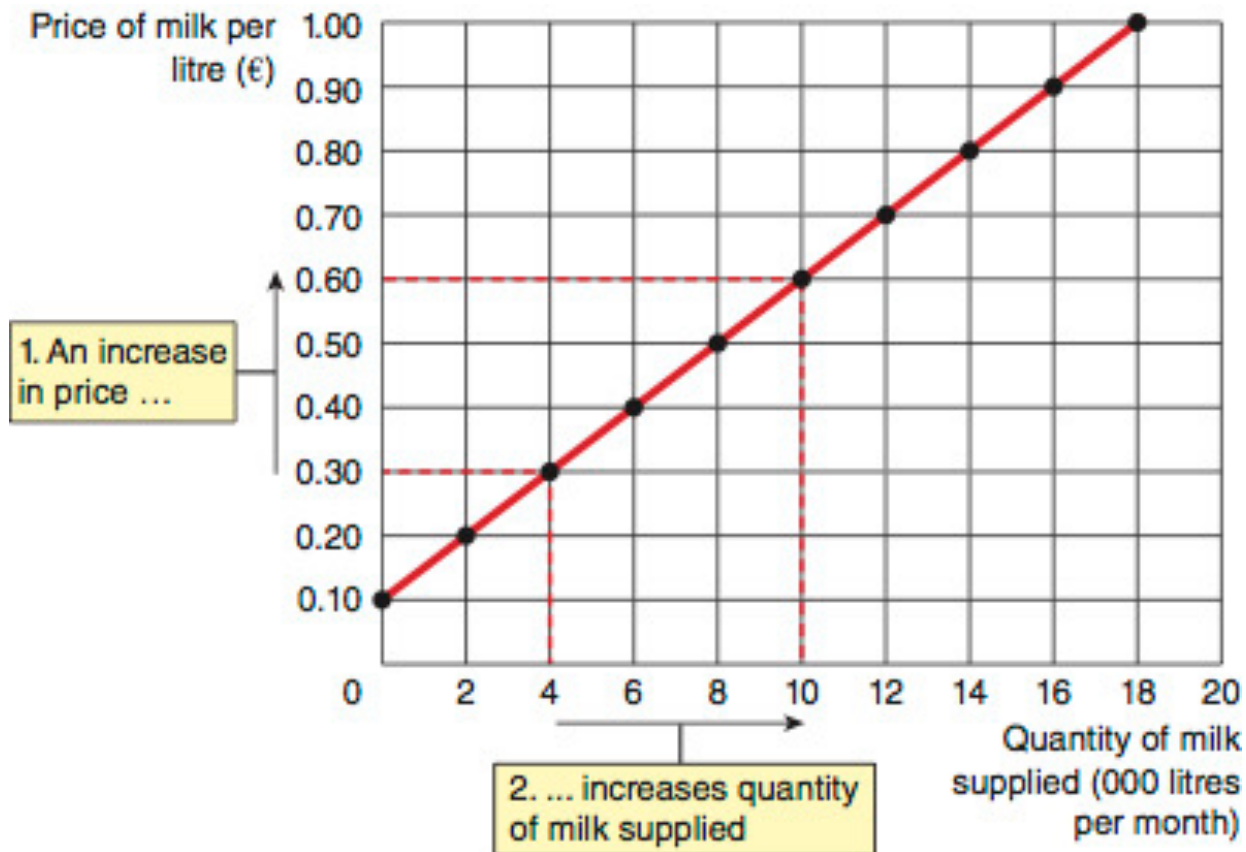


# UK Breadmaking Wheat Prices, January 2018 – March 2016 (£ per tonne)

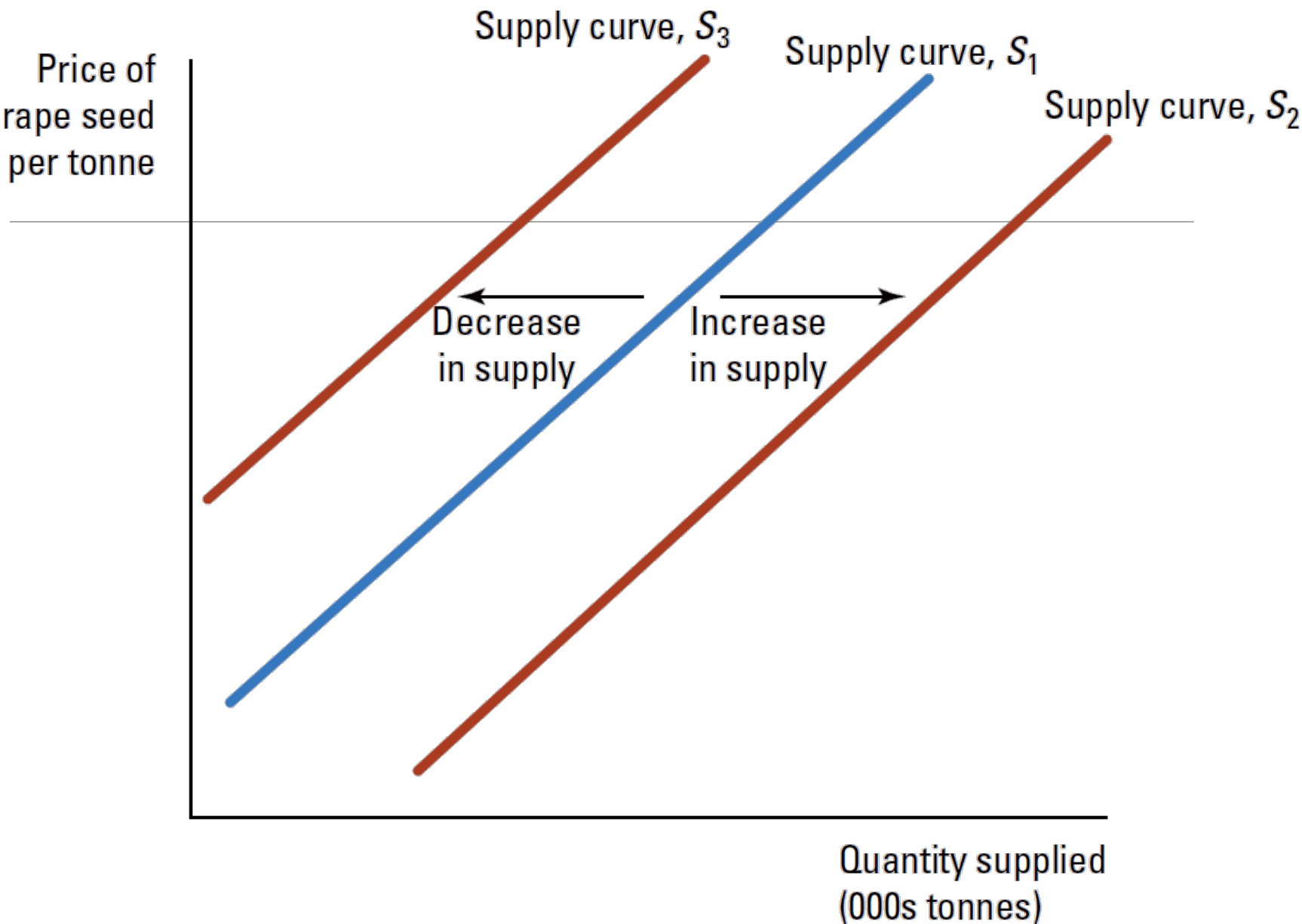




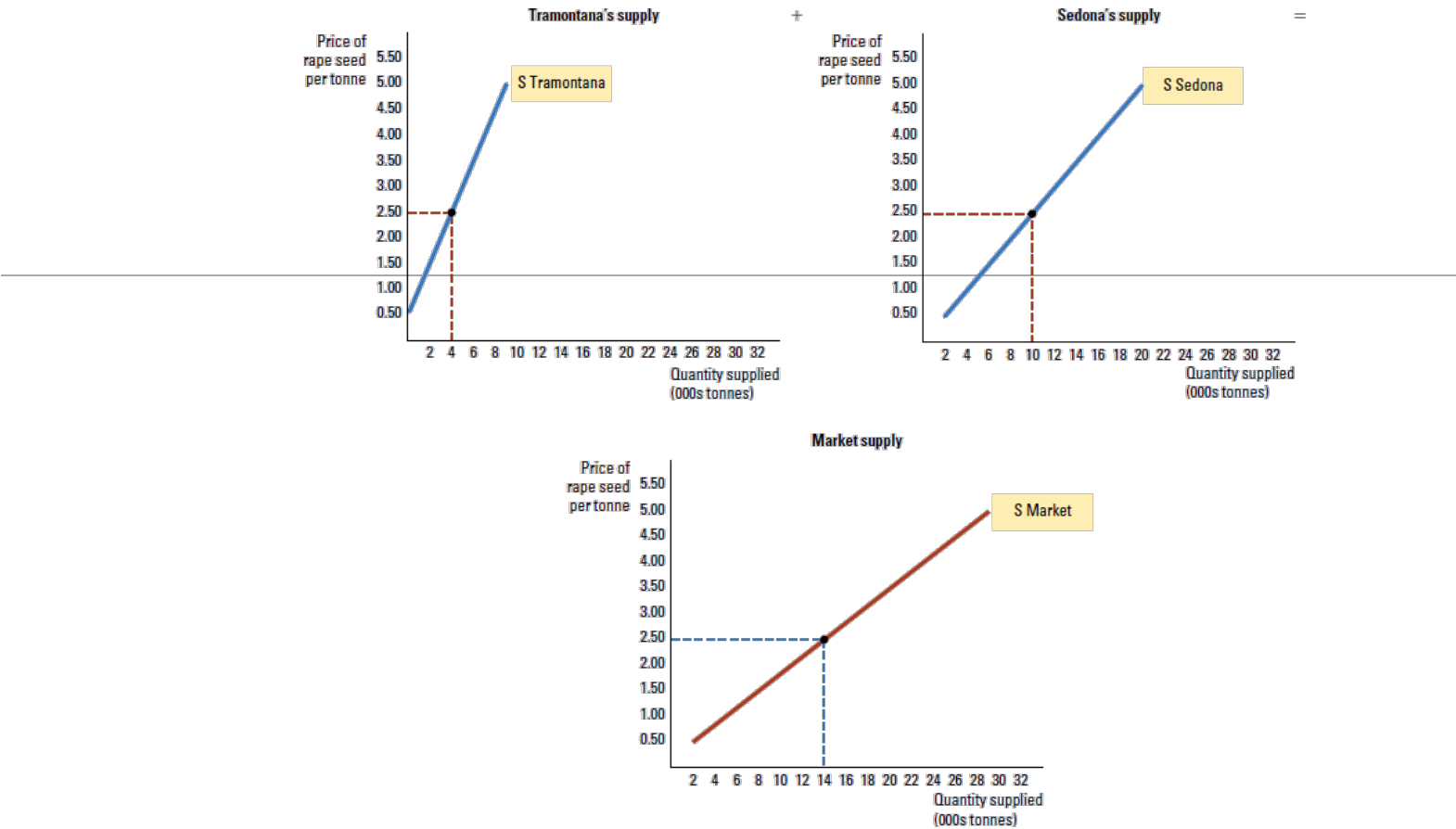
# Richard's Supply Schedule and Supply Curve



Shifts in the Supply Curve

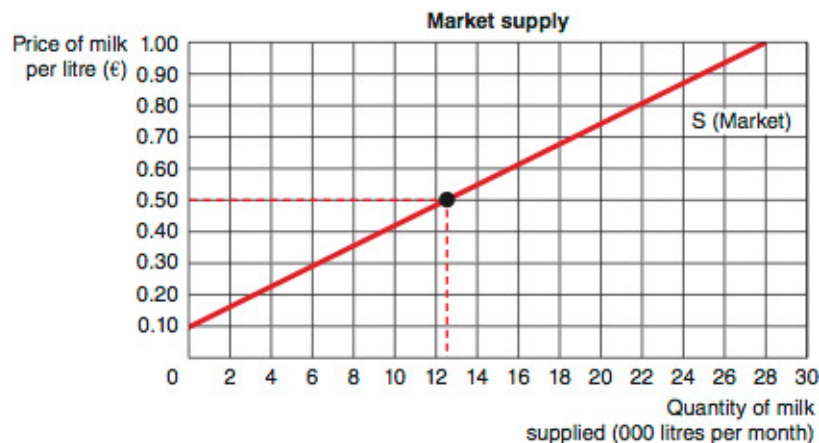
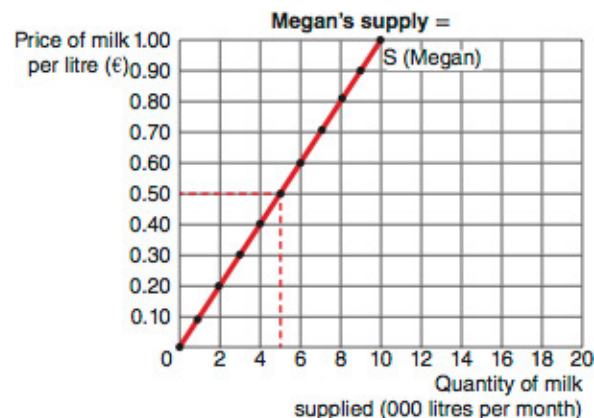
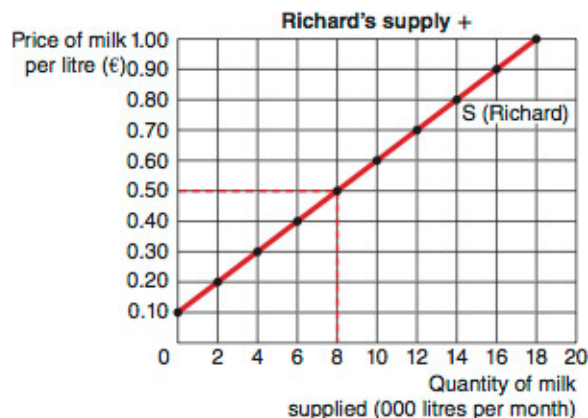


# Market Supply as the Sum of Individual Supplies



Price of rape seed (per tonne)	Tramontana (000s)		Sedona (000s)		Market (000s)
€0.50	0	+	2	=	2
1.00	1		4		5
1.50	2		6		8
2.00	3		8		11
2.50	4		10		14
3.00	5		12		17
3.50	6		14		20
4.00	7		16		23
4.50	8		18		26
5.00	9		20		29

# Market Supply and the Sum of Individual Supplies

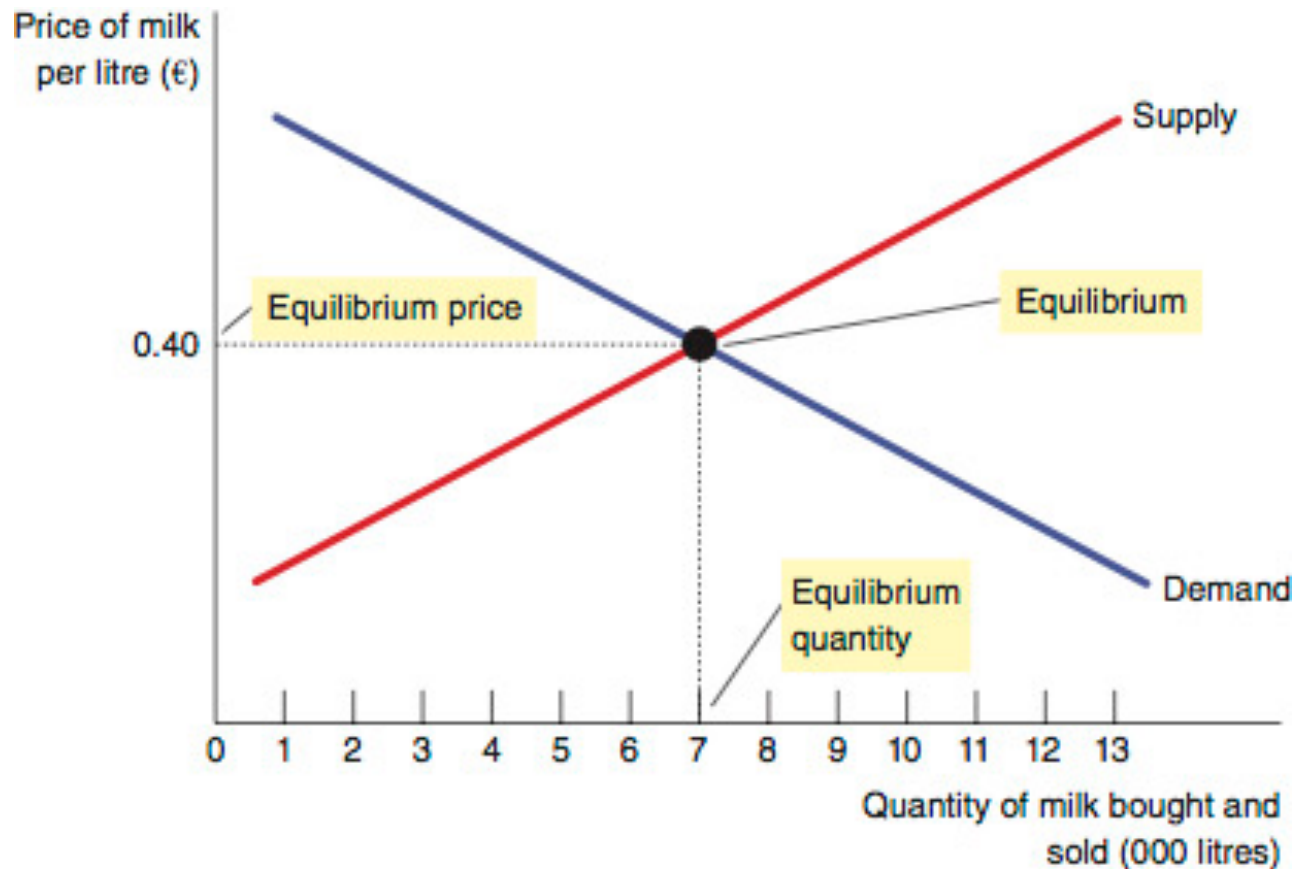


*This table lists the variables that affect how much producers choose to sell of any good. Notice the special role that the price of the good plays: a change in the good's price represents a movement along the supply curve, whereas a change in one of the other variables shifts the supply curve.*

Variable	A change in this variable ...
Price	Is represented as a movement along the supply curve
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Number of sellers	Shifts the supply curve

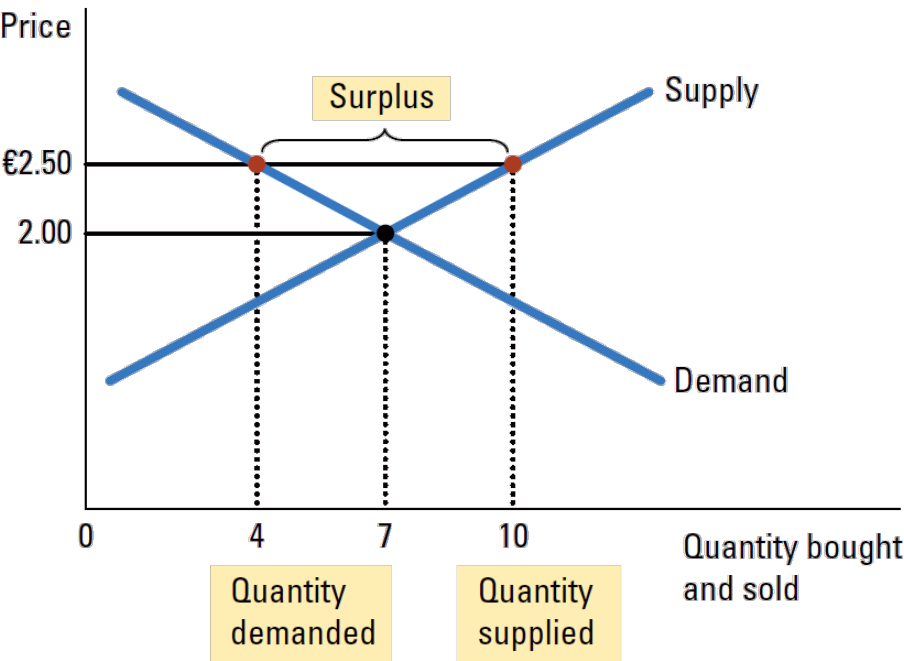


# The Equilibrium of Supply and Demand

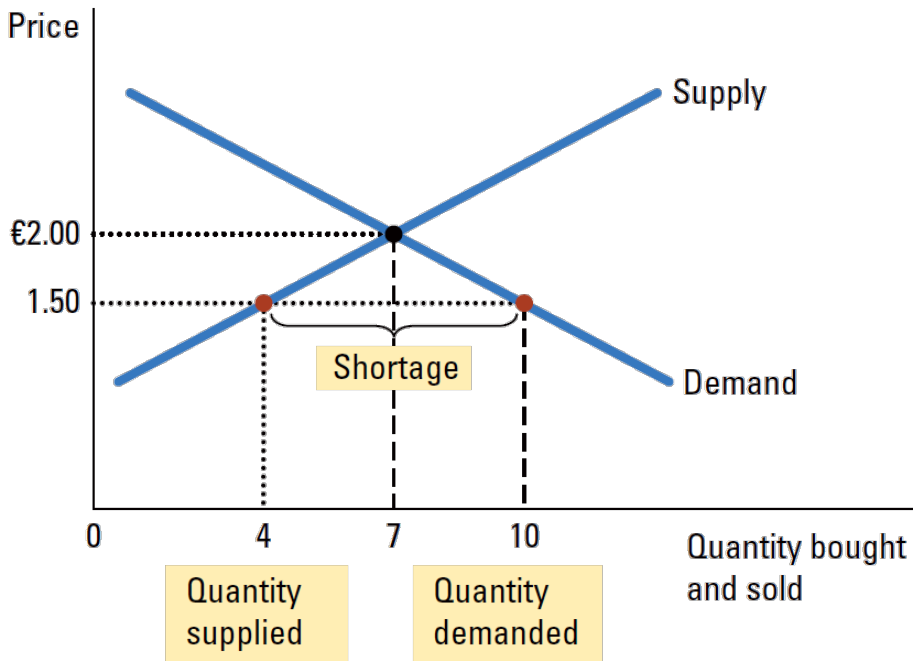


# Markets Not in Equilibrium

(a) Excess supply

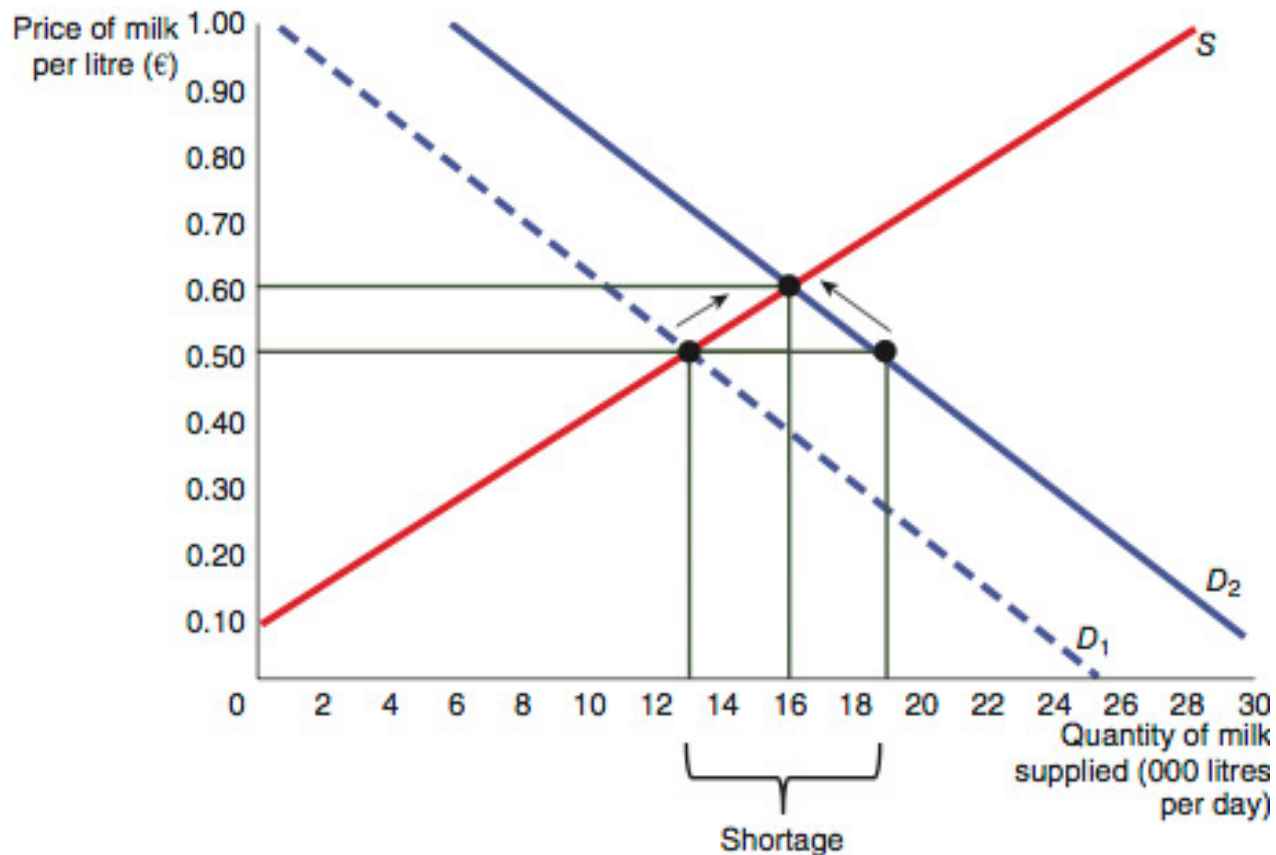


(b) Excess demand



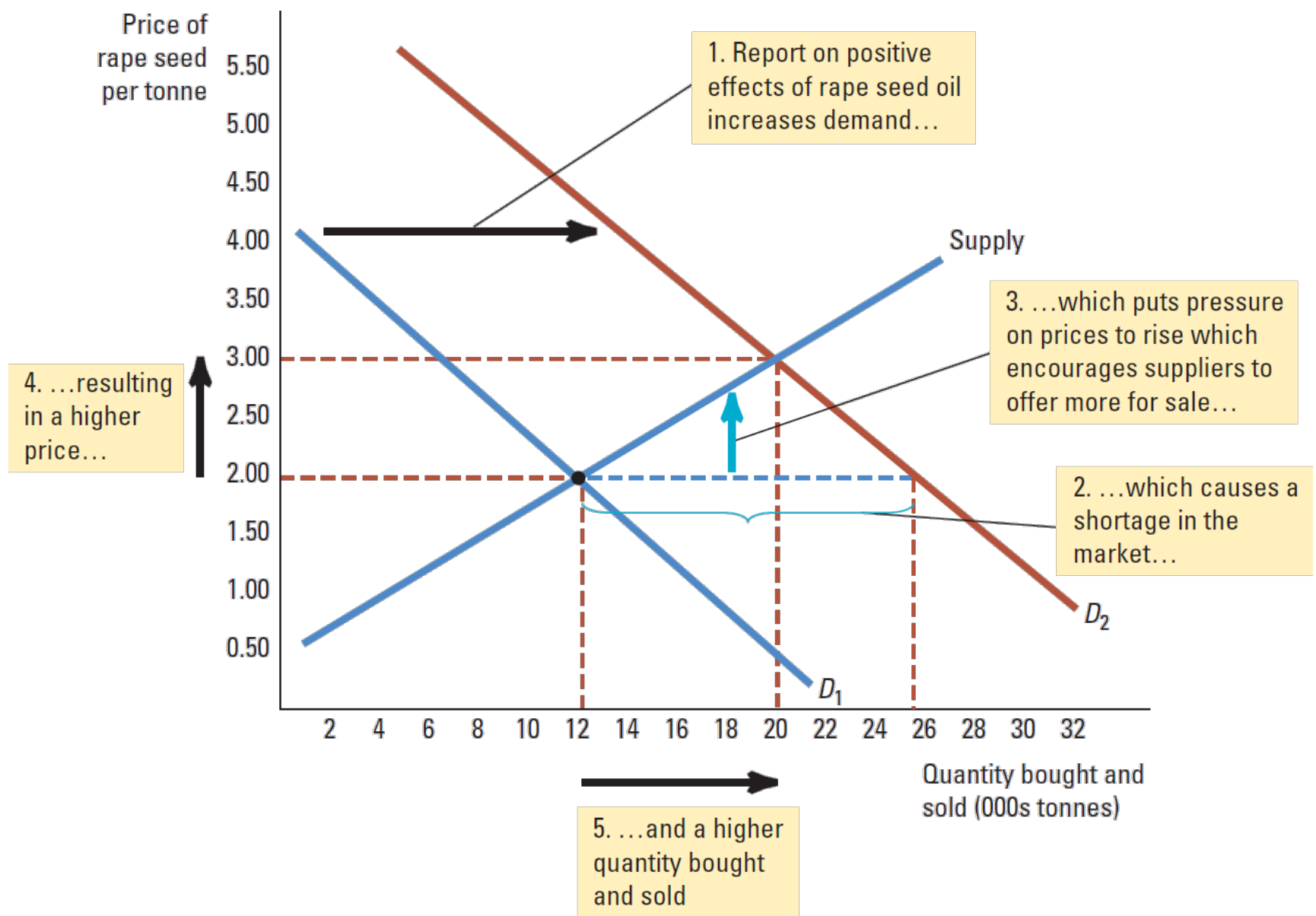


# How an Increase in Demand Affects the Equilibrium

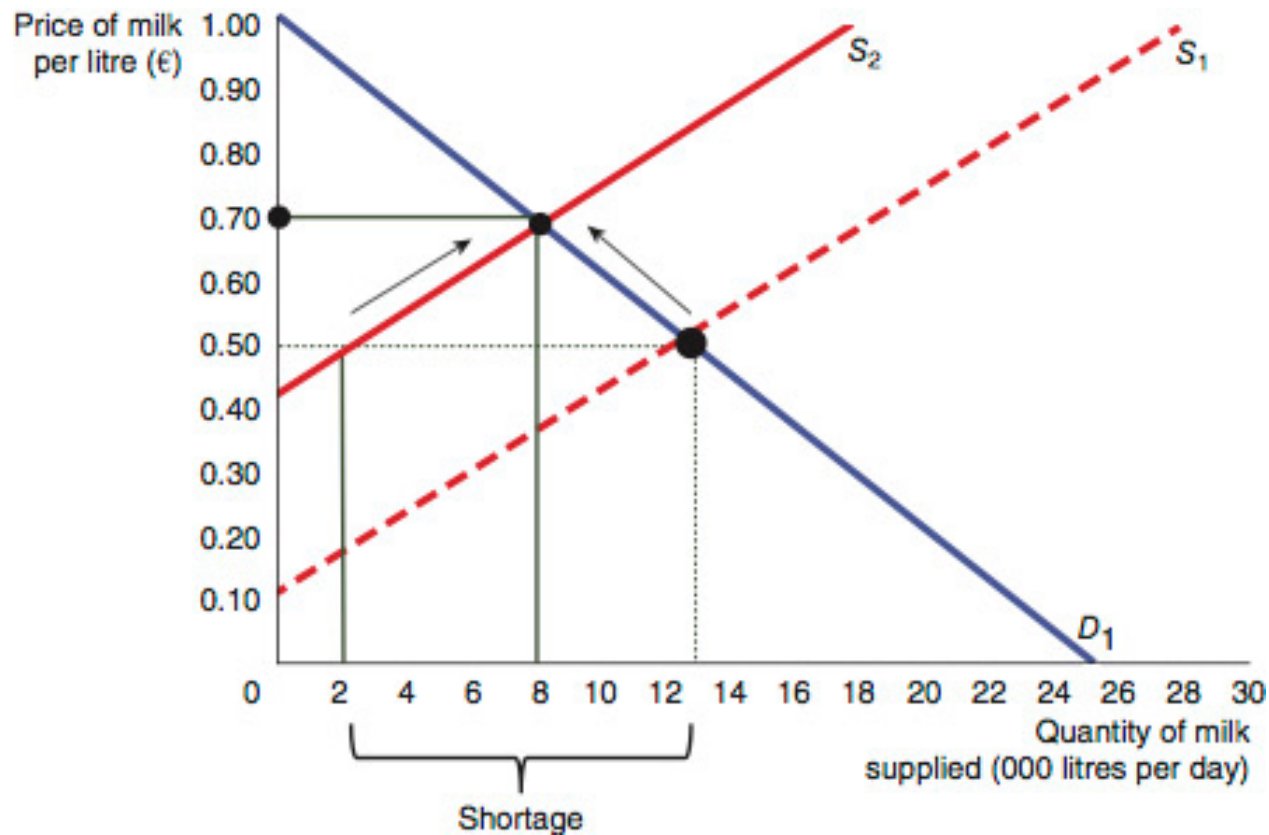




# How an Increase in Demand Affects the Equilibrium



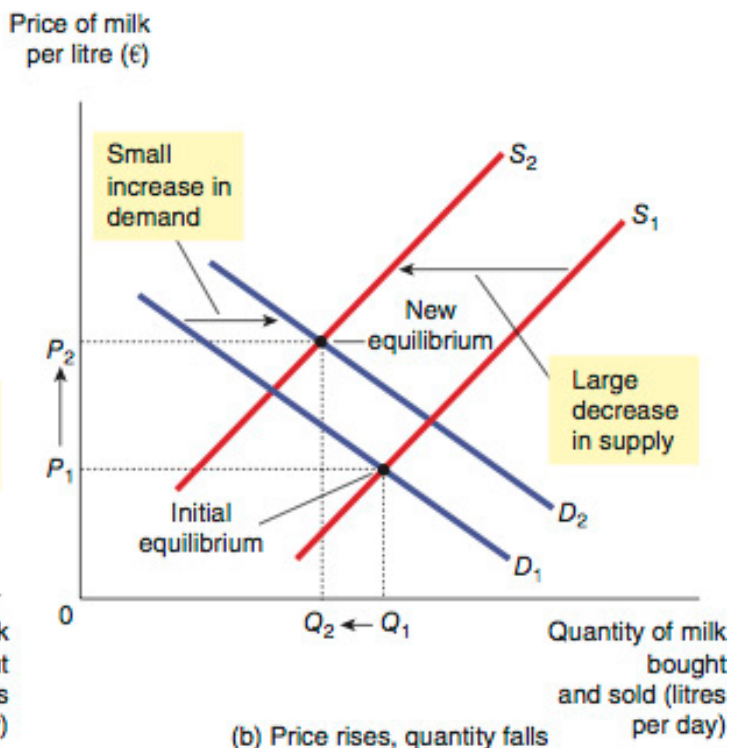
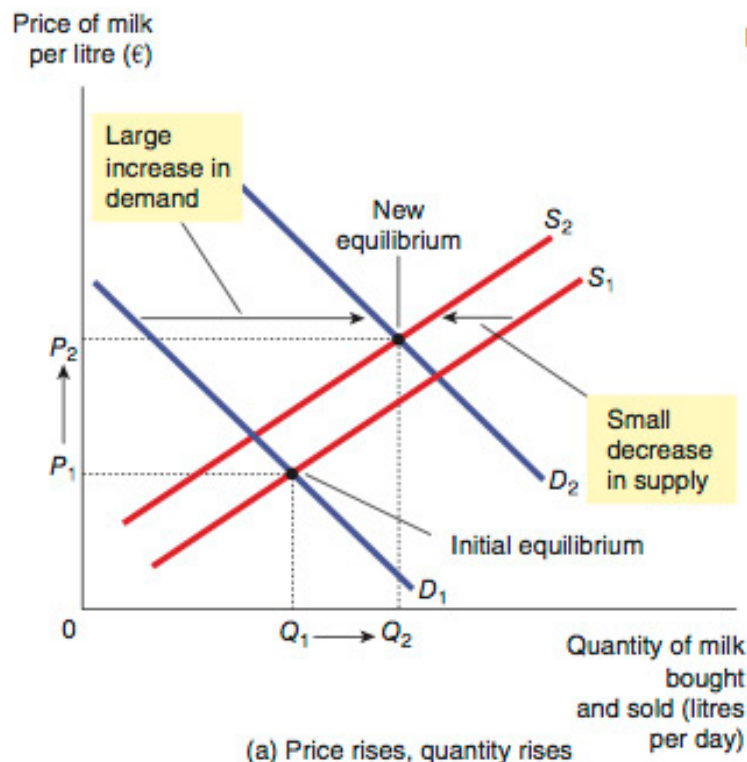
# How a Decrease in Supply Affects the Equilibrium



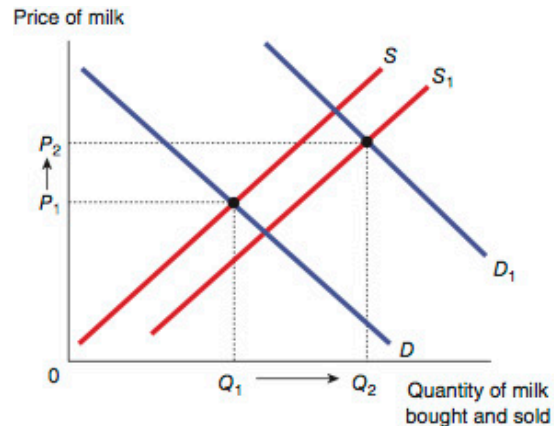
## A Three-Step Programme for Analysing Changes in Equilibrium

1. Decide whether the event shifts the supply or demand curve (or perhaps both).
2. Decide in which direction the curve shifts.
3. Use the supply and demand diagram to see how the shift changes the equilibrium price and quantity.

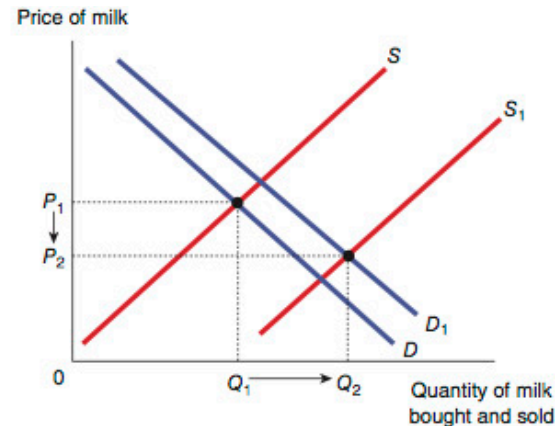
# A Shift in Both Supply and Demand (i)



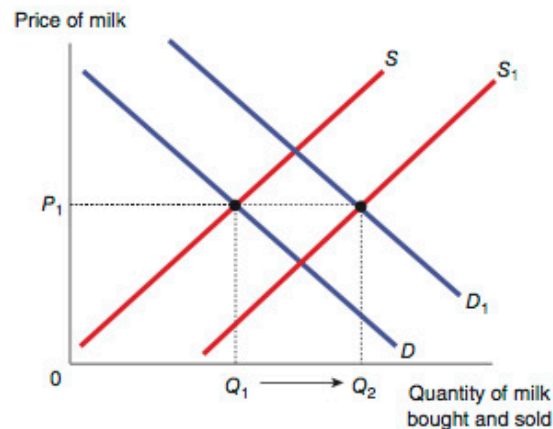
# A Shift in Both Supply and Demand (ii)



(a)



(b)



(c)